## Remarks/Arguments

Claims 1, 3-7, 9-11 and 14-23, 25 and 26 remain pending in the application. Reconsideration and reexamination are requested.

Claims 1 and 26 have been amended to recite "the supporting surface of the sealing ring can be brought into flat and full area contact with the supporting flank of the groove, wherein the supporting surface of the sealing ring as well as the supporting flank of the groove have an inclination angle of 30° to 60°, wherein the supporting surface is completely designed as a lateral surface of a truncated cone, resulting in flat contact with the supporting flank of the groove, wherein the second gap extends over the entire lateral extension of the sealing ring. Claim 25 has been similarly amended but already included the feature of the inclination angle of 30° to 60°.

Support for the feature of "full area contact" may be found at page 9, lines 6-9 of the English translation which recite "[i]n this context, the sealing ring support surface can be brought into contact with the supporting flank in sealing fashion over part of its surface, and particularly over its whole surface, preferably around the entire circumference." Accordingly, no new matter has been entered.

Support for the feature of inclination angle may be found in claim 3 and at page 5, lines 1-5 and at page 9, line 17 of the English translation. Accordingly, no new matter has been entered. Claim 3 has been cancelled.

Support for the feature of "supporting surface is completely designed as a lateral surface of a truncated cone, resulting in flat contact with the supporting flank of the groove" may be found at page 4, lines 27-34 which recite "[t]he pressurizing surface and/or the supporting surface are preferably each designed at least partly, or completely, as the lateral surface of a truncated cone, this resulting in flat contact with the respective supporting flank or pressure-side flank of the groove at all times, also upon radial expansion/compression of the sealing ring. The respective lateral supporting and/or pressurizing surfaces each surround the sealing ring over its entire circumference." Accordingly, no new matter has been entered.

Support for the feature of "the second gap extends over the entire lateral extension of the sealing ring" may be found at page 16, lines 11-13 which recite "[a]ccording to the practical

example, gap **10** extends over the entire lateral border or radial extension of the sealing ring." Accordingly, no new matter has been entered.

Dependent claim 11 has been amended to recite "that the sealing surface is partly or entirely arranged concentrically to the central longitudinal axis of the sealing ring, and is designed as the surface of a cylinder that can be a radially external or internal boundary surface of the ring". Support may be found at page 4, lines 7-11 which recite "[i]n this context, the sealing surface is partly or entirely arranged concentrically to the central longitudinal axis of the sealing ring, and is preferably designed as the surface of a cylinder that can be a radially external or internal boundary surface of the ring." Accordingly, no new matter has been entered.

A new claim 27 has been entered, which includes the features of herein amended claim 25 and comprising the further features

-wherein the sealing surface of the sealing ring is the surface with the greatest width referring to the cross-sectional view of the sealing ring (see page 7, lines 10-15 for support);

-wherein the sealing surface of the sealing ring is in flat and full area contact with the supporting flank of the groove over the entire height and the entire circumference of the sealing ring (see page 9, lines 6-9 for support);

-wherein the pressurizing surface of the sealing ring has an inclination angle of 30° to 60° towards the sealing surface of the sealing ring (see page 5, lines 1-5 and page 9, line 17 for support); and

–wherein the sealing surface of the sealing ring in the pressurized sealing position of the sealing ring is in full area contact with the opposite component (see page 9, lines 6-9 for support). Accordingly, no new matter has been entered.

Claims 1, 3-7, 9-11, 14-23, 25 and 26 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. These claims have been amended as suggested by the Examiner to provide antecedent basis, proper dependency, etc. and comply with USPTO practice. Claims 25 and 26 have been amended to recite "A sealing arrangement comprising"…

In addition, claims 1, 25 and 26 have been amended, as requested, to clarify that the claims are directed to the combination of sealing ring and two components moving relative to one another. This is in direct response to the inquiry at page 3 of the Office Action of September 28, 2007.

The Examiner has found new grounds for rejection of the claims. Claims 1, 4-7, 9, 11, 14-23 and 26 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Abiko (WO 01/84024A1). The U.S. equivalent appears to be USP 6,962,343.

Abiko appears to be directed at a seal ring that has been cut to include a projecting part and a recessed part and which may seal against an annular groove, however, the groove is shown as having square sides rather than a pressure-side flank and a supporting flank which are inclined relative to the surface of the sealing ring, each enclosing an angle of 30° to 60° towards said surface, as recited in amended claims 1 and 26. This was one feature of dependent claim which was not rejected as being anticipated by Abiko. With respect to the primary reference, Abiko, no full area contact of the supporting surface of the sealing ring with the supporting flank of the groove is taught or suggested as evidenced by the figures.

Dependent claims 4-7, 9, 11 and 14-23 depend directly or indirectly from amended claim 1 and are believed to be similarly distinguished.

Claims 3 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Abiko. The Examiner has stated at page 8 of the Office action that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to make the areas of the lateral surface of a truncated cone of the pressurizing or the supporting surface, each enclose an angle of 30° to 60° with the sealing surface towards said sealing surface as a matter of mechanical experience." Applicants respectfully disagree.

According to the present invention, the position of the sealing ring is self-adjusted by the pressurized fluid which is introduced into the second gap extending over the entire height of the sealing ring, wherein due to the specific angles of the pressurizing surface and the supporting surface of the sealing ring the sealing surface of the ring can be pressed with high forces against the sealing surface of the second component (see force triangle FD, FP, FS in Figure 1b), so that improved sealing properties are achieved and in the case of axially rotating components the sealing ring can be rotationally fixed to the component contacting the sealing surface **2** of the sealing ring, providing both an unexpected result and a major advantage.

In addition, it is possible to achieve a substantially larger contact area between the sealing area and a shaft and therefore a significantly longer flow path for leaks with the present invention than with the cited art.

Claim 25 has been amended to include the features of "flat contact with the supporting flank of the groove, wherein the second gap extends over the entire lateral extension of the sealing ring." Abiko does not teach or suggest such features.

Claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Abiko in view of Flick (USP 2,970,871).

Flick discloses that sealing rings may be made of leather, rubber, synthetic rubber Teflon, etc. Claim 10 depends directly from amended claim 1 and is believed to be similarly distinguished. Further, Flick does not appear to make up for the deficiencies of Abiko as discussed above.

In the present amendment claim 3 has been cancelled, and claims 27 has been added. The present Amendment thus adds one additional independent claim in excess of the three (3) previously paid for and no additional claims in excess of the total number of twenty-four (24) claims originally paid for. Authorization for a credit card payment in the amount of $105 to cover the additional independent claim fee is being filed via EFS along with the two-month extension fee of $230.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 50-2121.

In consideration of the amendments to the claims and the remarks hereinabove, Applicant respectfully submits that all claims currently pending in the application are believed to be in condition for allowance. Allowance at an early date is respectfully solicited.

In the event the Examiner deems personal contact is necessary, please contact the undersigned attorney at (603) 668-6560.

Respectfully submitted,

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